



CHAPTER 38

Natural Resource Management

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1. Biodiversity Strategy - Greenweb

The natural resources of Sutherland Shire are a fundamental element of its character. It is the scale of National Parks and bushland reserves, the quality of the waterways and the coastal environment, the existence of remnant bushland within urban areas and the presence of established canopy trees which define the character of the Shire. Council's strategy is to manage significant vegetation, vegetated links and waterways throughout Sutherland Shire to ensure the long term conservation of the biodiversity of the Shire and surrounds. This approach is consistent with the principles of ecologically sustainable development.

Greenweb is Sutherland Shire Council's biodiversity strategy. The Greenweb seeks to conserve and enhance Sutherland Shire's bushland and biodiversity by identifying and appropriately managing key areas of bushland habitat and establishing and maintaining interconnecting linkages and corridors.

The Greenweb is mapped to include:

- **Core areas** of high significance to the sustainability of the Greenweb as they contain key habitat areas, key linkages and threatened species or endangered ecological communities. These key habitats are of a size that maintains their viability and are generally larger than 3.5 hectares.
- **Support areas** that provide ancillary habitat areas or secondary linkages between habitats. They also contain lands that form a buffer between developments adjacent key habitats and corridors.
- **Restoration areas** that provide opportunities for the establishment and vegetation of corridors between core areas.

Greenweb will assist long term biodiversity by strengthening links between areas of core habitat and by creating links where none currently exist. This is a long term strategy to ensure ecological communities do not become isolated resulting in their local extinction over time.

The objectives and controls in this chapter will affect the siting of development on parcels of land, determine what vegetation is retained and how proposed landscape elements are integrated with new development. Council's Greenweb Strategy is also used by council to ensure its public works, street planting, open space management and bush revegetation strategies maximise their contribution to natural resource management.

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the locality. Plants selected are Australian natives only. The tool is available online at

http://www.sutherlandshire.nsw.gov.au/My_Place/Trees/Native_Plant_Selector



1.1 Objectives for All Greenweb Areas

1. Prevent direct loss of habitat in core and support areas by requiring the retention or restoration of areas of habitat in a size and configuration that will enhance long term sustainability.
2. Prevent fragmentation of bushland by requiring the landscaped component of a site to function as a wildlife corridor, linking proximate areas of habitat.
3. Improve the function of riparian zones and foreshores as natural areas so that they provide linkages and corridors between areas of habitat.
4. Minimise weed invasion and spread by requiring appropriate landscape treatment within Greenweb areas.
5. Require revegetation of habitat or corridor, so as to compensate for detrimental impacts accruing from the development of land.
6. Utilise landscaped area to re-establish corridors in urban areas through the establishment of canopy and groundcover links across properties.

1.2 Controls for All Greenweb Areas

1. Greenweb areas are to be landscaped with species indigenous to the Sutherland Shire. Trees and landscaping should be provided in a form and configuration that maintains and enhances the core habitat and vegetated linkages.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the locality. Plants selected are Australian natives only. The tool is available online at http://www.sutherlandshire.nsw.gov.au/My_Place/Trees/Native_Plant_Selector

2. Development should contribute to the maintenance of local habitats and connectivity between bushland remnants.
3. Bushfire asset protection zones must not be in identified area of key habitat and corridors except in the case of development or redevelopment of single dwellings and secondary dwellings on existing lots or alterations and additions to existing dwellings.
4. Development should ensure that off site impacts into adjoining bushland are minimised, such as weed invasion, increased runoff and stormwater pollutants.

1.3 Controls for Greenweb Core Areas

1. Development should maintain habitats in a size and configuration that ensures their ongoing viability and sustainability.
2. Development should ensure connectivity between bushland remnants. To achieve this, corridors should be of a scale commensurate with the habitats they connect.



1.4 Controls for Greenweb Support Areas

1. Development should, through its siting, design and landscape treatment, maximise habitat values and minimise disruption to connectivity through:
 - a. continuous canopy and understorey planting along one boundary, or
 - b. retention and revegetation of remnant bushland elements.
2. The required treatment will depend upon the scale of the bushland remnants linked by the land or the quality of the remnants to be retained on site.

1.5 Controls for All Development in Greenweb Restoration Areas

1. Development should contribute to a long term strategy of establishing connectivity between bushland remnants through its siting, design and landscape treatment.
2. For residential development connectivity can be achieved through:
 - a. Planting of species indigenous to the locality, and
 - b. Retention of native canopy trees.
3. For development in employment zones connectivity can be achieved through the planting of species indigenous to the Sutherland Shire.



2. Wetlands and Waterways

Wetlands and waterways play a critical function in ecological processes. Wetlands and waterways are valuable breeding sites for a large range of species and help sustain the food chain for wildlife. Wetlands also help purify water thereby improving the quality of the larger water bodies. Waterways also act as valuable corridors for wildlife. The health and quality of the Shire's primary waterways are dependent upon the health of all wetlands and waterways in their catchments. As such, it is essential that the connectivity between wetlands and waterways is recognised and equal attention is given to preserving and enhancing the quality of all elements.

Given that runoff from surrounding land is critical to the performance of a wetland, buffer areas around wetlands are very important. Similarly, the riparian zone of a waterway is also critical to the biodiversity of a waterway.

Wetlands, wetland buffer areas, waterways and riparian zones in Sutherland Shire have all been mapped and are shown on maps entitled "Wetlands and Waterways" which form part of this DCP. The objectives and controls in this section apply to all land identified on this map.

Coastal Saltmarsh and Sydney Freshwater Wetlands are listed as endangered ecological communities under the NSW Threatened Species Act. A 100m buffer zone applies to these endangered ecological communities. This 100m buffer provides for a transitional zone between vegetation communities where the two communities blend into one another, and where wetlands change in size due to drought and flooding e.g. ephemeral wetlands and further provides a necessary buffer from the impacts due to developments and changes to drainage patterns.

Mangroves are protected under the NSW Fisheries Act and are mostly found in fourth and third order waterways in Sutherland Shire. A 40 metre buffer applies to mangrove wetlands which is consistent with the Georges River REP.

The buffer zones for non natural wetlands depend on the size of the water body. The land which immediately adjoins a waterway and which is influenced by the waterway is known as the riparian zone. The width of the riparian zone, measured from the bank of the water, is determined by its category from first to fourth order. A fourth order river such as the Georges, Woronora and Hacking Rivers would require a buffer of 40 metres which is consistent with Georges River REP. As the waterway category decreases (fourth order to first order) so does the ecosystem complexity and the requirement for wider buffer zones to protect these waterways.

2.1 Objectives for All Development on Land Marked on the Wetlands and Waterways Map

1. Protect, restore and maintain ecological processes, natural systems and biodiversity within wetlands and waterways.
2. Minimise sedimentation and pollution of wetlands and waterways.
3. Restore degraded wetlands, wetland buffer areas, waterways and riparian zones.



4. Ensure appropriate fire management regimes and hazard reduction techniques for wetlands, wetland buffer areas, waterways and riparian zones.
5. Encourage best practice environmental design measures so that the sustainability of wetlands and waterways is maintained or improved.

2.2 *Controls for land marked on the Wetlands and Waterways Map*

1. Development shall minimise changes to the local surface runoff and groundwater flows to ensure that appropriate water flow regimes are maintained to wetlands and waterways.

Note to Subclause 1:

If a wetland has a high conservation value, the wetland should not be subject to any development (there should be no significant loss of wetlands).

2. Stormwater flow is to mimic natural conditions and ensure a dispersed pattern of flow, avoiding newly created centralised or concentrated discharge points into the wetland or waterway.

Note to Subclause 2:

This may require the improvement and or rehabilitation or both of creeks and removal of existing pipes.

3. Disturbance to stream and wetland sediments is to be minimised by regulated discharge of stormwater and dissipation of flows at discharge locations.
4. Development shall not result in detrimental changes to temperature, salinity, chemical makeup and sediment loads of water entering the wetland or waterway.

Note to Subclause 4:

A specialist Ecological Assessment may be required for development applications for any development on land that is within a wetland, immediately adjoins a wetland or is located within a Wetland Buffer Area.

The Ecological Assessment must indicate consideration of the potential impacts of the development on the values of the wetland and the objectives of these provisions.

5. Where stormwater is proposed to be discharged to a wetland or waterway, pollution is to be reduced by installation of pollution and sediment control devices. Access to and cleaning of devices shall not compromise the wetland area's function or natural attributes. The following standards are to be met:
 - a. Pollutant levels shall be below those outlined in the ANZECC (2001) Guidelines for the Protection of Aquatic Ecosystems.
 - b. Pollution control devices shall be located so that they are not within a wetland or watercourse itself.



6. There shall be no clearing of indigenous vegetation within wetlands or riparian zones and clearing of indigenous vegetation within Wetland Buffer Areas shall be minimised.

Note to Subclause 6:

Any harm to or removal of marine vegetation including seagrass, macro algae and mangroves will require approval of NSW Fisheries.

7. There shall be no clearing of indigenous stream bank vegetation and aquatic habitat.

Note to Subclause 7:

The progressive removal of exotic stream bank vegetation and the rehabilitation with locally native species is supported.

8. Removal of woody debris from wetlands and waterways should be minimised.
9. There shall be no in-stream blockages to fish passage.

Note to Subclause 9:

Any blockage to fish passage (temporary or permanent) will require approval by NSW Fisheries.

10. Lateral connectivity between waterways and riparian vegetation must be maintained. To satisfy this control proposed landscaping will have to in part, reflect a natural environment in terms of finished levels and the distribution of vegetation.
11. Bush fire asset protection zones must be located outside of the wetland buffer and riparian zone, except in the case of development or redevelopment of dwelling houses and secondary dwellings on existing lots or alterations and additions to existing dwellings.

Note to Subclause 11:

The establishment and maintenance of Asset Protection Zones should avoid the need for removal of wetland vegetation. Wetland vegetation, such as mangroves and saltmarsh, is generally non-combustible and as such do not usually require removal or management for bush fire fuel reduction purposes. Clearing of vegetation within the buffer zones adjacent to the wetlands should be minimised. Buffers of retained vegetation should be retained between the wetland and the established Asset Protection Zone.



3. Threatened Species

Threatened species are particular plants and animals that are at risk of extinction. Threatened species also include threatened populations and endangered ecological communities. Unless the processes that are threatening these species are controlled (habitat loss, pollution, competition from introduced plants or animals), they are at risk of disappearing within the next 50 years.

Threatened fauna (animal) species move around and endangered vegetation communities tend to grade from one type to another without hard and fast boundaries. In order to account for this a buffer is generally drawn around a known area of habitat. This buffer also recognises that development adjacent to these habitats has the potential to impact on them through processes such as stormwater runoff and escape of weeds and domestic animals.

Threatened species, populations and ecological communities are protected by the NSW Threatened Species Conservation Act 1995, NSW Fisheries Management Act 1994 and the Commonwealth Environmental Protection and Conservation of Biodiversity Act 1999.

In order to assist landowners in identifying where threatened species, populations and ecological communities are known to exist, all known sites in Sutherland Shire have been mapped by Council. These appear on the maps entitled "Species and Communities of High Conservation Significance" which form part of this DCP.

Note:

A threatened population is a group of the same species which live in a particular area, while an endangered ecological community refers to a group of many plants and animals that live in a particular area, each of which are at risk of becoming extinct.

3.1 Controls

1. Development in areas which contain threatened species, populations or ecological communities or in adjoining buffer areas which may impact on these species, requires special consideration under the Threatened Species Conservation Act 1995 (as amended) and the Environmental Planning and Assessment Act 1979 (EP&A Act).

Note to Subclause 1:

Generally, this is by way of an 'Assessment of Significance', which provides a mechanism for assessing the impact of the proposed works on threatened species, ecological communities and their habitats and whether further assessment needs to be undertaken

2. Where Section 5A of the EP&A Act (Assessment of Significance) concludes that there is likely to be a significant effect on threatened species, populations or ecological communities, a Species Impact Statement (SIS) is required to be submitted with the development application. Additionally, Federal legislation, namely, the Environment Protection and Biodiversity Conservation Act 1999 may also apply.



4. Tree and Bushland Vegetation

Sutherland Shire is fortunate to have large areas of National Parks, Public Reserves and open spaces which protect a broad range of vegetation types that sustain a diversity of fauna and flora. Remnant and planted canopy trees are very prominent throughout the Shire. The presence of extensive vegetation and trees creates an urban bushland feel that is valued by the residents, and is an essential part of the character and lifestyle of the Shire.

Existing trees and bushland throughout the urban area complement the protected natural areas and provide a bushland setting in many parts of the Shire. Bushland and trees also play an important role in conserving biodiversity throughout the Sutherland Shire, essentially by providing habitat and vegetated links with other areas of habitat. In areas more removed from large areas of bushland, existing trees and pockets of bushland improve the urban landscape by offsetting the bulk and scale of development. Trees in urban areas also help create privacy and assist in managing microclimate. The existence of large scale canopy trees across the Shire establishes a treed character that differentiates it from other local government areas in southern Sydney and creates a unique sense of place

This section of the DCP specifies the species, kinds and size of trees protected from damage or removal in Sutherland Shire. It contains the objectives and assessment principles that Council will use to determine applications to remove or carry out other work on trees and bushland vegetation. It also establishes what Council will consider to be acceptable practices for the protection of trees during construction, the removal of weeds, bush regeneration and the pruning of trees.

This section applies to all land to which Sutherland Shire Local Environmental Plan 2015 (SSLEP2015) applies, except land zoned National Parks and SP2 Infrastructure (Defence) and any land under the ownership or care, control and management of Sutherland Shire Council where the work is carried out by or on behalf of Council.

Note:

Bushland and trees on land owned or in the care, control and management of Sutherland Shire Council are managed in accordance with Council's adopted policy: "Urban Tree and Bushland Policy" which is available for public viewing.

4.1 Objectives

1. Ensure the retention and protection of trees and bushland vegetation that are important to the conservation of biodiversity in Sutherland Shire, and the maintenance of the scenic quality and treed character of Sutherland Shire.
2. Ensure trees in urban areas are managed in a way that reduces known risks to life and property.
3. Ensure the retention and protection of valuable trees and vegetation on development sites and on adjacent property.
4. Require the retention or restoration of vegetation on steep gradients or along waterways to assist in minimising slope instability and soil erosion.
5. Ensure appropriate measures are adopted to eliminate environmental weeds.
6. Ensure effective bushland regeneration.



7. Ensure proper pruning of trees and vegetation.

4.2 Controls for Preservation of Trees and Bushland Vegetation

1. This clause specifies the trees and bushland vegetation to which the controls for the preservation of trees and bushland vegetation contained in SSLEP2015, apply.
2. This clause applies to any tree or bushland vegetation which satisfies any one or more of the following criteria:
 - a. A single or multi trunked tree with a diameter of 100mm or more measured at 500mm above ground level.
 - b. Any bushland vegetation, including mangroves. Bushland vegetation for the purpose of this clause means vegetation which is either remnant of the natural vegetation of the land or, if altered, is representative of the structure and the floristics of the natural vegetation. For the purposes of this sub-clause, bushland vegetation includes trees of any size, shrubs and all herbaceous species; and
 - c. Any tree and/or riparian vegetation growing within 4 metres of a creek or watercourse.

Note:

There are two methods of obtaining authority to remove trees and bushland vegetation:

- a. as part of a development consent
- b. a permit granted by the council.

If authorisation is required as part of a development consent, the development application must clearly identify the trees and bushland vegetation to be removed.

4.3 Species Exempt from this Order

1. Despite any other provision of this plan, any development comprised in the removal of any of the vegetation listed in the Table to this clause may be carried out without consent unless the vegetation is or forms part of a heritage item.

Trees

Botanical name	Common name
<i>Acacia podalyriifolia</i>	Queensland Silver Wattle
<i>Acacia saligna</i>	Golden wreath wattle
<i>Acer negundo</i>	Box elder
<i>Araucaria bidwillii</i>	Bunya bunya pine
<i>Arundinaria</i> spp	Clumping Bamboo
<i>Chamaecyparis pisifera</i> spp	Conifer
<i>Cinnamomum camphora</i>	Camphor laurel
<i>Citrus</i> spp	Cumquat, Grape Fruit, Lemon, Lime, Mandarin, Orange (edible species)
<i>Cupressus arizonica</i>	Arizona Cypress
<i>Cupressus macrocarpa</i> var <i>brunniana</i>	Brunnings Golden Cypress



<i>Cupressus sempervirens</i> <i>Cupressocyparis leylandii</i>	Pencil Pine or Italian Cypress Leyland Cypress (and their cultivars)
<i>Eriobotrya japonica</i>	Loquat
<i>Erythrina X sykesii</i>	Coral tree
<i>Ficus benjamina</i>	Weeping fig
<i>Ficus elastica</i>	Rubber tree
<i>Grevillea robusta</i>	Silky oak
<i>Hakea salicifolia</i>	Willow Leaved Hakea
<i>Liquidamber styraciflua</i>	Liquidamber
<i>Morus nigra</i>	Black Mulberry
<i>Olea europaea subsp cuspidata</i>	African Olive
<i>Phoenix canariensis</i>	Canary Island Date Palm
<i>Phyllostachys aurea</i>	Fishpole Bamboo
<i>Phyllostachys nigra</i>	Black Bamboo
<i>Pinus radiata</i>	Radiata Pine or Monterey Pine
<i>Pomme</i> spp	Apple, Crab Apple, Nashi Fruit, Pear, Quince (edible species)
<i>Populus nigra "Italica"</i>	Lombardy poplar
<i>Prunus</i> spp	Apricot, Cherry, Nectarine, Peach, Plum
<i>Robinia pseudoacacia</i>	Black Locust
<i>Schefflera actinophylla</i>	Umbrella tree
<i>Syagrus romanzoffiana</i>	Cocos palm

Weeds

Botanical name	Common name
<i>Acetosa sagittatus</i>	Turkey rhubarb
<i>Ageratina adenophora</i>	Crofton weed
<i>Ageratina riparia</i>	Mist flower
<i>Anredera cordifolia</i>	Madiera vine
<i>Araujia hortorum</i>	Moth vine
<i>Arundo donax</i>	Giant reed
<i>Bambusa</i> spp	Bamboo
<i>Cardiospermum grandiflorum</i>	Balloon vine
<i>Chamaecytisus palmensis</i>	Tree lucerne
<i>Coreopsis lanceolata</i>	Coreopsis
<i>Cotoneaster franchetii</i>	Grey Leaf or Franchet Cotoneaster
<i>Cotoneaster glaucophyllus</i>	Large Leaf Cotoneaster
<i>Cotoneaster lacteus</i>	Milkflower Cotoneaster
<i>Cotoneaster pannosus</i>	Silver Leaf Cotoneaster
<i>Cytisus scoparius</i>	Scotch broom



<i>Delairia odorata</i>	Cape ivy
<i>Dipogon lignosus</i>	Dolichos pea
<i>Ehrharta erecta</i>	Veldt grass
<i>Eragrostis curvula</i>	African love grass
<i>Erigeron karvinskianus</i>	Erigeron daisy
<i>Genista monspessulana</i>	Montpellier broom
<i>Hedera helix</i>	English ivy
<i>Hedychium gardnerianum</i>	Wild ginger
<i>Hydrocotyle bonariensis</i>	Kurnell curse
<i>Ipomoea cairica</i>	Coastal morning glory
<i>Ipomoea indica</i>	Morning glory
<i>Ligustrum lucidum</i>	Large leaf privet
<i>Ligustrum sinense</i>	Small leaf privet
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Myrsiphyllum asparagoides</i>	Bridal creeper
<i>Nephrolepis cordifolia</i>	Fish bone fern
<i>Ochna serrulata</i>	Ochna
<i>Paraserianthes lophantha</i>	Crested wattle
<i>Persicaria capitata</i>	Japanese knot weed
<i>Polygala myrtifolia</i>	Polygala
<i>Protasparagus aethiopicus</i>	Asparagus fern
<i>Protasparagus plumosus</i>	Climbing asparagus
<i>Psoralea pinnata</i>	African scurf pea
<i>Senecio angulatus</i>	Climbing groundsel
<i>Senna pendula var glabrata</i>	Cassia
<i>Sollya heterophylla</i>	Bluebell creeper
<i>Thunbergia alata</i>	Black-eyed Susan
<i>Tradescantia albiflora</i>	Wandering Jew
<i>Vinca major</i>	Blue periwinkle

Noxious weeds

Botanical name	Common name
<i>Acacia nilotica</i>	Prickly Acacia
<i>Alternanthera philoxeroides</i>	Alligator weed
<i>Cestrum parqui</i>	Green cestrum
<i>Chrysanthemoides monilifera</i>	Bitou bush
<i>Cortaderia selloana</i>	Pampas grass
<i>Cylindropuntia</i> spp	Tree Cholla
<i>Eichorina crassipes</i>	Water hyacinth
<i>Gymnocoronis spianthoides</i>	Sengal tea plant
<i>Hypericum perforatum</i>	St John's wort
<i>Lantana camara</i>	Lantana red and pink flower



<i>Ludwigia peruviana</i>	Ludwigia
<i>Mimosa pigra</i>	Mimosa
<i>Oputia</i> spp	Prickly pear
<i>Parietaria judaica</i>	Asthma weed
<i>Ricinus communis</i>	Castor oil plant
<i>Salix</i> spp	Willows (includes all <i>Salix</i> species except <i>Salix babylonica</i> , <i>Salix reichardtii</i> and <i>Salix calodendron</i>)
<i>Salvinia molesta</i>	Salvina
<i>Tamarix aphylla</i>	Athel Tree
<i>Toxicodendron succedaneum</i>	Rhus tree

4.4 Other Trees Exempt from this Section

1. Despite any other provisions in this plan works to trees or the removal of trees and bushland is exempt from this order in the following circumstances:
 - a. The work being carried out is for pruning where the tree has been subject to storm damage, and part of the limb is broken, and the work relates to the damaged part of the tree; or
 - b. The work being carried out is confined to the removal of tree branches which directly overhang the roof of a residence or commercial building and the extent of the work is limited to the pruning of branches to the nearest branch junction or collar to clear the roofline, provided the owner of the tree is in agreement. Pruning must be consistent with the relevant Australian Standard for the Pruning of Amenity Trees (AS4374-2007).
 - c. Removal of a tree that poses an immediate and obvious danger, provided that the tree's instability is obvious and that there is immediate danger and/or hazard to life and/or property. In such instances, a landowner is required to be able to support the immediacy of the danger by the risk being witnessed by a Council Officer, Police Officer or other Emergency Services Officer. Alternatively, a report by a suitably qualified and experienced person, or photographic evidence and Statutory Declarations from third parties should be obtained. Circumstances where the use of this exemption is appropriate include trees with structurally split trunks; trees or limbs felled by storms that are damaging buildings or blocking access ways; or
 - d. Removal of trees or bushland where it is essential for emergency access or emergency works by Council or a public authority; or
 - e. Removal or burning of trees or bushland which are a bush fire hazard identified as part of a bush fire risk management plan prepared by the Bushfire Management Committee and approved by the Bushfire Coordinating Committee under s54 of the Rural Fires Act 1997.
 - f. Removal of any non-indigenous species growing within bushland.
 - g. The removal of, or any work to, any tree carried out by Sutherland Shire Council where the tree is located on land in the ownership, or the care, control or management of Sutherland Shire Council and the work is carried out by or on behalf of Council.



4.5 Special Considerations for Trees Jeopardising Public Safety

4.5.1 Objective

1. To ensure trees in urban areas are managed in a way that reduces known risk to human life and property.

4.5.2 Assessment Principles

1. Public safety considerations will always take priority over other assessment principles specified in this section.
2. Where Council accepts that a tree is proven to be dangerous, or where a tree is, or is likely to cause structural damage to a building Council will permit the tree to be removed. This subclause does not apply to minor ancillary structures, out buildings, driveways, fences or paths.
3. Despite subclause 2 above, where risk and damage can be adequately reduced by pruning or maintenance and the tree is significant against other assessment criteria, consent will be given to pruning, or other maintenance suggested, rather than permitting the tree to be removed.
4. In determining the risk posed by a tree, Council will take into consideration the advice of trained Council officers; alternatively Council will consider a report prepared by an Arborist who is a member of the National Arborists Association of Australia at a grade of General Member, Affiliate Member or Life member, or alternatively, a person who has obtained a TAFE Certificate in Horticulture (Arboriculture) level 4 or higher.

4.6 Special Considerations for Trees and Bushland in Areas subject to Bush Fire Risk

4.6.1 Objectives

1. Achieve an appropriate balance between the conservation of the natural environment and the provision of appropriate bush fire protection measures for development in areas subject to bush fire risk.
2. Minimise the risk to life and property from bush fire by limiting exposure to bush fire threats.

4.6.2 Assessment Principles

1. Considerations of bush fire risk will always take priority over other assessment principles specified in this section, provided the land is bush fire prone land.
2. Council will permit the removal of trees or bushland, or other works, where the vegetation makes a significant contribution to the vulnerability of buildings to bush fire risk. Council will rely on the advice of the Rural Fire Service in determining the threat posed by the tree or bushland.



3. Council will not permit the removal of a tree where the tree is of a species generally accepted as being appropriate in bush fire prone areas and the tree is otherwise sensibly located in relation to assets on site, or where management practices can control risk.
4. Despite subclauses 2 and 3, Council may require the retention of existing trees that contain hollows or other significant habitat for indigenous fauna. In such cases, work will be restricted to maintenance to reduce risk factors.

4.7 *Special Considerations in Relation to Trees which are Causing Personal Hardship*

4.7.1 *Objectives*

1. Balance the protection of trees against the needs of frail and/or aged residents who cannot manage necessary tree maintenance
2. Ensure that all reasonable alternate options for support in the maintenance of a tree (physical and financial) from family, friends, community services, have been exhausted
3. Recognise that some trees result in significant debilitating medical conditions for residents.

4.7.2 *Assessment Principles*

1. Where significant and ongoing hardship is established to Council's satisfaction, it will always take priority over other assessment principles specified in this section.
2. Tree removal to reduce maintenance is insufficient grounds for Council to approve removal of a tree. Trees inherently result in maintenance issues for the property owner. Leaf drop, fallen flowers and fruit, bird and animal droppings and fallen branches are normal biological processes that are part of living in a treed urban area.
3. Despite subclause 2, Council will permit the works or the removal of a tree if its retention would result in excessive hardship on the resident, make it difficult for the resident to remain living in their home or result in significant medical conditions. Council will not permit the removal of an otherwise valuable tree if the maintenance issue relates to a pool, outbuilding or a minor element of a site.
4. Clear evidence of hardship must be provided by the resident (e.g., a medical certificate), linking their medical condition with the tree in question.
5. In assessing whether a valuable tree should be removed on personal hardship grounds, it is the responsibility of the property owner to explore alternative which will enable retention of the tree. Council will consider any other way in which the hardship on the residents could be reduced and the tree retained. If an alternative to removal can be found, this shall be trialled before permission is granted for removal. Only where clear evidence of ongoing hardship can be demonstrated to Councils satisfaction will removal of the tree be considered.



4.8 Special Considerations for Trees which Contribute to Scenic and Visual Quality

4.8.1 Objectives

1. Prevent the degradation of visual amenity and scenic quality by requiring the retention and enhancement of vegetation in areas of high scenic quality.
2. Ensure the preservation and enhancement of the natural character of foreshore areas.
3. Preserve existing streetscape character.
4. Preserve trees in areas where trees of a similar type or scale make a strong contribution to neighbourhood character.
5. Retain individual trees which are local landmarks or which singularly make a positive contribution to the quality of the streetscape or locality.
6. Ensure trees are retained along ridge tops where they provide a backdrop to development.
7. Ensure remnant trees are retained throughout the urban area.
8. Provide an appropriate balance between residents' desire for views from their properties and the achievement of the objectives of this section.

4.8.2 Assessment Principles

1. This clause must be read in conjunction with the other assessment criteria specified in this Section. Considerations of public safety, bush fire risk, or hardship will take priority over considerations of scenic and visual quality.
2. Council will not permit the removal of a tree which is readily visible from a waterway or foreshore open space.
3. Council will not permit the removal of trees located on a ridge line where the tree creates a backdrop to development so that it does not stand out against the sky.
4. Council will not permit the removal of remnant indigenous trees and large scale canopy trees where the existence of such trees creates distinctive local streetscape character.
5. Council will not permit the removal of a tree that, due to its age, scale, form or species, makes a significant contribution to the character of a streetscape or locality.
6. The retention of trees in foreshore areas offsets the bulk and scale of development and makes a significant contribution to scenic and visual quality of the Shire. The objective of retaining trees for their wider value is often in conflict with residents' desires to achieve views from their properties. Council will not permit tree removal purely to enhance views. Council may consent to the thinning of tree canopies or other works to trees to enhance views from private properties.



4.9 Special Considerations for Trees in Greenweb Areas

Note:

Greenweb is a strategy to conserve and enhance Sutherland Shire's bushland and biodiversity by identifying and appropriately managing key areas of bushland habitat and establishing and maintaining interconnecting linkages and corridors.

The Greenweb is mapped and comprises:

- **Core areas** of high significance to the sustainability of the Greenweb as they contain key habitat areas, key linkages and threatened species or endangered ecological communities. These key habitats are of a size that maintains their viability and are generally larger than 3.5 hectares.
 - **Support areas** that provide ancillary habitat areas or secondary linkages between habitats. They also contain lands that form a buffer between developments adjacent key habitats and corridors.
 - **Restoration areas** that provide opportunities for the establishment and vegetation of corridors between core areas.
-

4.9.1 Objectives

1. Prevent direct loss of habitat in core and support areas by requiring the retention or restoration of habitat in a size and configuration that will enhance long term sustainability.
2. Prevent fragmentation of bushland by requiring the retention or restoration of vegetation that contributes to the functioning of that area as a wildlife corridor, linking proximate areas of habitat.
3. Require the retention and/or restoration of vegetation on steeper slopes to assist in minimising slope instability and soil erosion.
4. Require restoration of degraded areas of habitat or corridor.
5. Require the creation of a habitat or corridor so as to compensate for detrimental impacts accruing from development of land.
6. Re-establish corridors in established urban areas through canopy links across properties.

4.9.2 Assessment Principles

1. This clause applies to all land shown on the maps entitled "Greenweb Strategy" which form part of the Development Control Plan as being Greenweb Core, Greenweb Support or Greenweb Restoration.
2. This clause must be read in conjunction with the other assessment criteria specified in this Section. Considerations of public safety, bush fire risk, hardship or scenic and visual quality will take priority over Greenweb considerations.



3. All species indigenous to Sutherland Shire are to be retained.
4. Native species that are not indigenous to the locality, or an exotic species with significant habitat value, may only be removed if replacement planting is to be undertaken which meets the following criteria:
 - a. It will improve the environmental function of the land by creating continuous canopy and under storey links, or
 - b. The proposed planting will provide habitat for fauna known to inhabit the locality or includes species that are rare in the locality, or
 - c. The proposed planting will improve the potential of the site to meet the Biodiversity - Greenweb objectives specified in SSDCP2015, or
 - d. The proposed planting replaces a non locally indigenous tree which is, or is likely to, distribute viable seed into bushland areas, and
 - e. The replacement planting will reinstate privacy to neighbouring properties where removal of the tree will result in overlooking of neighbouring living room windows or outdoor living areas.
5. An exotic species without habitat value may be removed if replacement planting is to be undertaken which meets the following criteria:
 - a. It will generally improve the potential of the site to meet the objectives of the clause, and
 - b. The replacement planting will reinstate privacy to neighbouring properties where removal of the tree will result in overlooking of neighbouring windows or outdoor living areas.
6. Council will not permit bushland vegetation to be removed on land shown on the maps entitled "Greenweb Strategy" as "Greenweb Core" or "Greenweb Support", other than for where it supported by the Rural Fire Service or where approval is granted as part of a development consent for work on the land.
7. Where vegetation which is proposed to be removed is located on land identified as Greenweb core or Greenweb support on the maps, connectivity shall be maintained between bushland remnants through the provision of minimum corridor widths as set out in the table below:

Remnants Habitat Connected by Corridor	Minimum Corridor Width
>100ha	200m
50ha – 100 ha	80m – 200m
5ha – 50 ha	30m – 80m
2ha – 5 ha	15m – 30m
<2ha	Continuous canopy along one boundary of the site

8. Existing vegetative cover is to be maintained on all slopes greater than 18 degrees.



4.10 Special Considerations for Trees which are Growing in Close Proximity to Buildings

4.10.1 Objectives

1. Recognise that some residents do not feel comfortable when large trees are located close to their residence and to balance this against the need to protect trees which contribute to the scenic and visual quality of the Shire and the sustainability of habitat.

4.10.2 Assessment Principles

1. This clause must be read in conjunction with the other assessment criteria specified in this Section. Considerations of public safety, bush fire risk, hardship, Greenweb, and scenic and visual quality will take priority over considerations of the proximity of the tree to buildings.
2. Council may permit removal of a tree located within three metres of a dwelling or swimming pool. For the purpose of this subclause the distance is to be measured from the outer face of the external enclosing wall of the dwelling or from the edge of any concrete slab forming part of the foundations of the dwelling to the trunk of the tree at its closest point. The distance is to be measured at a height 500mm above ground level. This clause does not apply to trees within three metres of decks, garages, out buildings, fences or ancillary structures.

Note to Subclause 2:

An application must still be submitted to Council and approved before a tree which is located within 3 metres of a building can be removed.

3. Council will permit the removal of branches that overhang a dwelling or swimming pool to reduce potential risk to life and property.

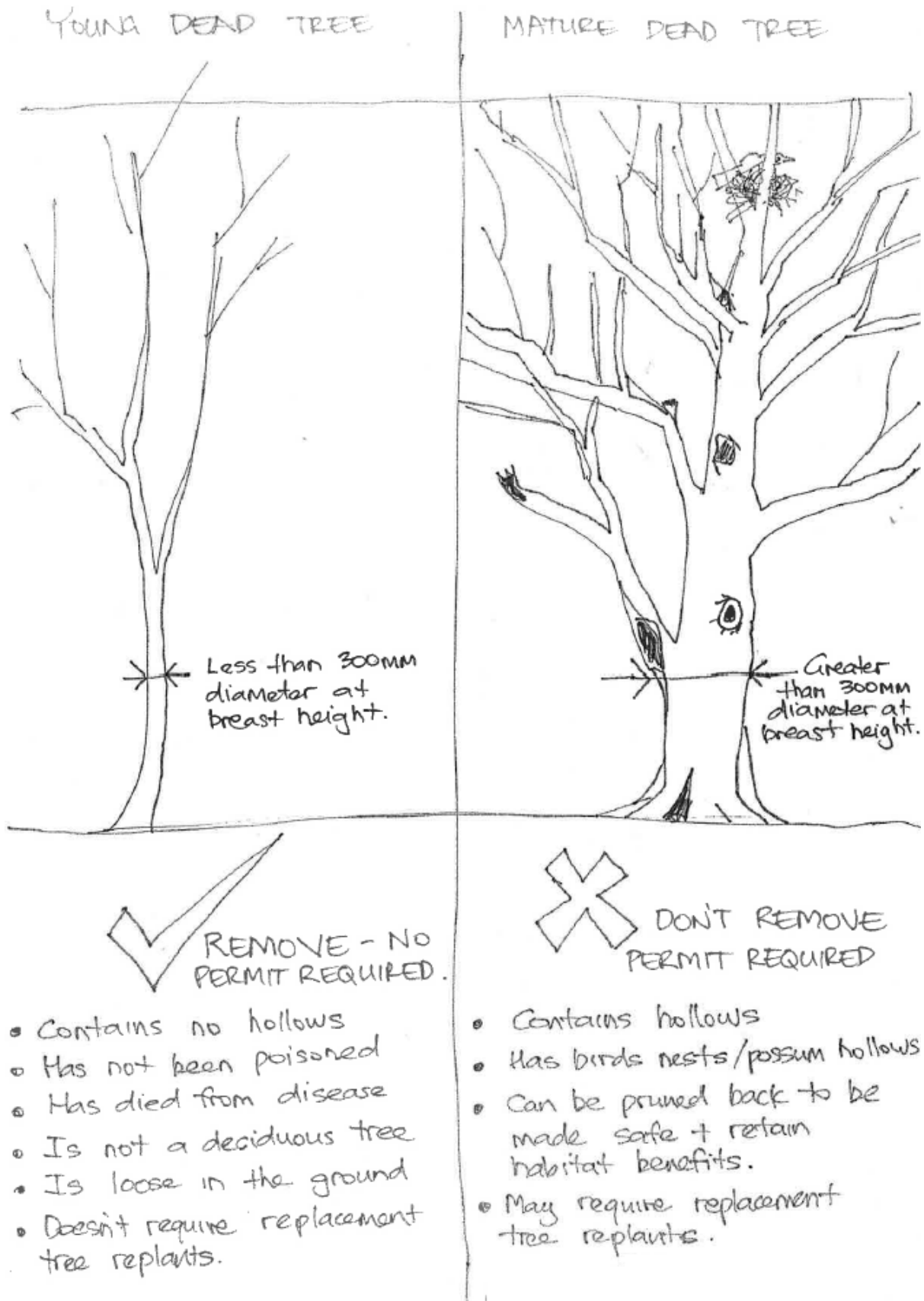
4.11 Special Considerations for Dead Trees which Contain Habitat

4.11.1 Objectives

1. To preserve habitat and breeding sites of native fauna.

4.11.2 Assessment Principles

1. This clause must be read in conjunction with the other assessment criteria specified in this Section. Considerations of public safety, bush fire risk and hardship will override considerations of habitat in dead trees.
2. Dead trees are generally exempt from protection except where they contain hollows or nesting sites for native fauna.





3. Existing hollows and/or nesting sites in trees will be required to be retained. However, in such cases, Council will consent to works to the tree to ensure public safety; such as pruning.

Note to Subclause 3:

Hollows are critical habitat elements for native fauna. Hollows are essential for breeding of a large number of species. Yet very few trees produce hollows and they are particularly rare in urban areas.

4.12 *Special Considerations for Trees which Contribute to Residential Amenity*

4.12.1 Objectives

1. Preserve trees which add value to residents' quality of life by enhancing privacy and outlook and offsetting the bulk and scale of buildings.
2. Preserve trees which help to establish a more desirable micro- climate for residents.

4.12.2 Assessment Principles

1. This clause must be read in conjunction with the other assessment criteria specified in this section. Considerations of public safety, bush fire risk, hardship, Greenweb, and scenic and visual quality will override considerations of residential amenity.
2. Council will not permit an existing tree to be removed where it provides screening to a living room window or an outdoor living area of an adjoining dwelling or which screens a major element of a building from view, unless the property owner that would be adversely affected is consulted and also wants the tree removed.
3. An existing tree which excessively overshadows a living room window or solar collector will be permitted to be pruned or removed if appropriate replanting is provided on site.

Note to Subclause 3:

Living room windows should be able to receive at least 2 hours of direct sunlight in mid-winter between 9am and 3pm.

4.13 *Special Considerations having regard to Health and Growing Conditions of Trees*

4.13.1 Objectives

1. Facilitate the removal of a tree that is in a poor state of health or is contributing to the poor health of a tree growing nearby.
2. Facilitate the removal of a tree that is not suited to its site conditions.

4.13.2 Assessment Principles

1. This clause must be read in conjunction with the other assessment criteria specified in this Section. Considerations of public safety, bush fire risk, hardship, Greenweb, and



scenic and visual quality will override considerations relating to the health and growing conditions of trees.

2. Council will permit the removal of a tree if the area is over planted and the removal will result in healthier growth of other more suitable species on site.
3. Council will permit the removal of a tree if it is unsuitable for its site given its location, ultimate size or other growth characteristic.
4. Where a tree is in a poor state of health, Council will permit the removal of the tree or works to improve its health.

4.14 Special Considerations for Trees and Bushland where work is to be carried out as Exempt or Complying Development

4.14.1 Objectives

1. Facilitate the carrying of work as Exempt or Complying Development.
2. Ensure the siting and carrying out of exempt and complying development is balanced against the protection of significant trees and vegetation.

4.14.2 Assessment Principles

1. Council may permit trees or bushland to be removed to facilitate the carrying out of exempt or complying development, provided that the applicant has submitted plans showing the extent of the works to be carried out and demonstrating that the trees or vegetation to be removed are either insignificant species, or that they do not significantly contribute to the amenity of the locality and do not provide significant wildlife habitat.
2. In making its decision council will have regard to any proposed replacement planting and any alternative siting of the proposed works.
3. Council will not permit the removal of an otherwise valuable healthy tree or element of bushland where reasonable alternatives exist on site to relocate the proposed works, or where the tree is of such value that protection is warranted.

Note:

Where consent is refused in accordance with this clause, the applicant may choose to lodge the proposal as part of a development application for the proposed work thereby allowing the merits of the tree removal to be assessed as an integral part of the development assessment process for the proposed building works.

4.15 Replacement Trees

1. Where Council consents to the removal of an existing tree or bushland in accordance with this section, it will require the replanting of species on the land the subject of the application at a rate of 4 to 1. Replacement tree species will be specified by Council and will be indigenous species of a type suitable for the site.



2. Where the land can gain views of waterways replacement species will consist of open form species to allow views to be gained through the canopy.
3. Replacement trees are to be cared for by the land owner until established.

Note to Subclause 2:

Some tree species have an open canopy that allow views to be gained through a tree such as generally occurs with *Angophora costata* or *Eucalyptus haemastoma*.

4.16 Controls for the Protection of Trees and Bushland during Construction

1. Where viable canopy trees or remnant bushland exist on a site, development shall be carefully designed and sited so that the removal of valuable trees and bushland is minimised.
2. Where no construction works are proposed, any existing indigenous undergrowth is to be retained.
3. All construction works (including the installation of services, site sheds, buildings and stockpile materials and rubbish) shall be located outside the tree protection zone (as specified in Table 1) of the trees and bushland areas to be retained. This requirement also applies to street trees and trees on adjoining land.

Table 1: Tree Protection Zone

Tree Age	Tree vigour	Trunk diameter (mm)	Minimum Distance (m)
Young trees (age less than 1/3 life expectancy)	Normal vigour	<200	2.0
		200 to 400	3.0
		>400	4.0
Young trees	Low vigour	<200	3.0
		200 to 400	4.5
		>400	6.0
Middle age trees (1/3 to 2/3 life expectancy)	Normal vigour	<250	3.0
		250 to 500	4.5
		>500	6.0
Mature trees	Normal vigour	<350	4.0
		350 to 750	6.0
		>750	8.0
Mature trees and Over mature trees	Low vigour	<350	6.0
		350 to 750	9.0
		>750	12.0

4. For the purpose of subclause 3:
 - a. consideration of the tolerance of individual species to disturbance may modify the minimum acceptable distance from that shown in this table



- b. minimum distance refers to the location of the tree protection fence when measured from the centre of the tree to protective fencing
 - c. with appropriate precautions, temporary site works may occur within the protected area
 - d. the use of under boring techniques at depths below 600mm, is required to be retained to minimise the impacts of installation of service conduits, pipelines or the like on trees and bushland.
5. An arborist, horticulturalist or bush regenerator may be required to undertake and supervise works on or near areas of bushland or individual trees required to be retained.
 6. Temporary fencing and siltation control measures shall be provided between site works and any trees or bushland on or adjacent to the site required to be retained.
 7. Surface and ground water flows to bushland areas and individual trees shall be maintained in their natural state.
 8. The position and alignment of foundations and underground services shall be designed and located to avoid the severing of tree roots greater than 50mm in diameter.
 9. Developments are to be designed to ensure that existing natural ground levels within Tree Protection Zones are maintained. Cut and fill within such areas is not permitted.
 10. Development should maintain vegetative cover on slopes greater than 18 degrees.

4.17 Controls for the Elimination of Weeds

1. Sites that contain noxious or environmental weeds listed in Clause 4.3 shall have these weeds removed in such a manner as to ensure that native vegetation is not destroyed. Ongoing management of the land must ensure that regeneration of such weeds does not occur.
2. Any imported fill or topsoil or other landscaping material to be used at the development site shall be free of noxious and environmental weeds.
3. Areas which have undergone weed removal shall be stabilised and rehabilitated to prevent erosion and loss of sediment in accordance with the provisions for environmental site management in Sutherland Shire Environmental Specification 2007 - Environmental Site Management.

Note to Subclause 1:

Prior to the commencement of weed removal, Council may be contacted for clarification of which plant species are weeds and for information regarding the most appropriate method of weed removal.

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4.18 Controls for Bush Regeneration

1. A qualified and experienced Bush Regenerator or Bush Regeneration Consultant will be required to undertake and supervise bush regeneration works on sites larger than 0.5ha or sites that are environmentally sensitive.
2. Bush regeneration shall occur utilising techniques recognised by the Australian Association of Bush Regenerators.